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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/667,742	09/22/2000	Charles Cameron Brackett	15-UL-5580	9983

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EXAMINER

HENEGHAN, MATTHEW E

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/667,742

Applicant(s)

BRACKETT, CHARLES CAMERON

Examiner

Matthew Heneghan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-29 have been examined.
2. Based upon applicant's specification, it is being presumed in this examination that all references to a "virus" in the claims teach to computer viruses, rather than biological viruses.

Information Disclosure Statement

3. The following Information Disclosure Statement in the instant application has been considered:

Paper No. 3, filed 30 June 2003.

Item G, German Patent Publication No. 4,344,280 was not supplied with a translation, and not considered. All other items in the IDS have been fully considered.

Specification

4. The title of the invention is not descriptive, due to the fact that the word "virus" has two distinctly different meanings within the pertinent arts. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: ULTRASOUND IMAGING SYSTEM HAVING
COMPUTER VIRUS PROTECTION.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 14-21 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: in claim 14, it is not clear how the hard disk interrelates with the other parts. For purposes of the prior art search, it is being presumed that the registry resides on the hard disk, and that the hard disk is part of the computer.

Claims 15-21 depend from rejected claim 14, and include all the limitations of that claim, thereby rendering those dependent claims incomplete.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,956,481 to Walsh et al.

As per claim 1, the virus protection mechanism disclosed by Walsh includes virus detection being run on a file before it is actually executed (see abstract) on a hard disk (see column 8, lines 16-17).

As per claim 4, an alert is given using a GUI program including virtual actuators (dialog boxes), and allows the file to be run if the correct actuator is selected (see column 11, line 29 to column 12, line 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,881,151 to Yamamoto.

Regarding claims 1-3, the virus diagnosing system disclosed by Yamamoto checks for a file using techniques including checksums and size checks before executing a program (see abstract).

Yamamoto discloses that the program is to be installed that the program is to be installed on file units, which comprise "a magnetic disk or the like" (see column 4, lines 8-20), but does not explicitly state that the disk is a hard disk.

Official notice is given that hard disks are the most commonly used type of disk on computers.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of Yamamoto using a hard disk, as that is the most commonly used type of disk on computers.

8. Claim 1, 4, 6-9, 12-17, 20-25, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,694,434 to McGee et al.

Regarding claims 1, 14, and 22, discloses that processes be checked against a registry (see column 5, lines 13-20) before being started (see column 4, lines 20-23), and that the applications may be on a disk (see column 4, line 62 to column 5, line 7), but does not explicitly state that a hard disk is used.

Official notice is given that hard disks are the most commonly used type of disk on computers.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of McGee using a hard disk, as that is the most commonly used type of disk on computers.

As per claims 15 and 23, registry information is signed (encrypted) using a private key (see column 4, lines 35-39), and authenticated (decrypted) using a public key (see column 5, lines 10-12).

Regarding claims 4, 6-9, 16, 17, 24, and 25, McGee discloses that the system checks if the application being started is on the registration list, and, if not, notifies the user about the potential virus and gets instructions using a graphical user interface (see column 7, line 63 to column 7, line 9 and column 7, lines 41-65), and kills the process if the user does not give permission (see figure 3a).

Regarding claims 12, 13, 20, 21, 28, and 29, after the user is notified that an application is requesting to execute (see column 8, lines 42-45), a second signal is sent to the user asking whether execution privileges should be granted (see column 8, lines 45-51), resulting in the application being registered.

McGee does not disclose the use of actuators in the user interfaces.

Regarding all limitations involving the use of virtual actuators in user interfaces, Official notice is given that the use of actuators for user dialog in graphical user interfaces is well-known in the art, as they make programs more user-friendly.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of McGee using actuators in the user interfaces, in order to make the system more user-friendly.

9. Claims 5, 10, 18, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,694,434 to McGee et al. as applied to claims 4, 9, 17, and 25 above, and further in view of U.S. Patent No. 6,266,773 to Kisor et al.

McGee does not disclose a log of events.

Kisor discloses a computer security system wherein historical events are compiled, so that the real time activity of a program can be monitored to see whether the real time activity fits within the stored patterns.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of McGee by compiling historical events, so that the real time activity of a program can be monitored to see whether the real time activity fits within the stored patterns.

10. Claims 11, 19, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,694,434 to McGee et al. as applied to claims 9, 17, and 25 above, and further in view of U.S. Patent No. 5,319,776 to Hile et al.

McGee does not disclose an option to delete files from storage after discovering that they may be infected.

Hile discloses a virus safeguard wherein infected files are deleted from storage (see column 7, lines 17-44), and further suggests that prevents the virus from spreading to other computer systems that communicate with that system (see column 2, lines 4-11).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of McGee by adding an option to delete files from storage, as disclosed by Hile, in order to prevent the virus from spreading to other computer systems that communicate with that system.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,684,875 to Ellenberger discloses a virus detection system that includes the storage of encrypted virus detection algorithms.

U.S. Patent No. 6,065,118 to Bull et al. discloses a system for isolating viruses by observing their effects in isolation.

U.S. Patent No. 6,275,937 to Hailpern et al. discloses a system for checking files for viruses in a server environment.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (703) 305-7727. The examiner can normally be reached on Monday-Thursday from 8:00 AM - 4:00 PM Eastern Time. The examiner can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached on (703) 308-4789.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

Or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park 2, 2121 Crystal Drive, Arlington, VA 22202, Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

MEH



April 7, 2004



GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100